Association for Information Systems

AIS Electronic Library (AISeL)

ICEB 2007 Proceedings

International Conference on Electronic Business (ICEB)

Winter 12-2-2007

Customer Relationship Management: Examining the Central Proposition in the Online Context

Byron Keating

Ali M. Quazi

Anton Kriz

Follow this and additional works at: https://aisel.aisnet.org/iceb2007

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2007 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Proceedings of The Seventh International Conference on Electronic Business, Taipei, Taiwan, December 2-6, 2007, pp. 74-81.

CUSTOMER RELATIONSHIP MANAGEMENT:

EXAMINING THE CENTRAL PROPOSITION IN THE ONLINE CONTEXT

Byron Keating, University of Wollongong, Australia, bkeating@uow.edu.au Ali M Quazi, University of Newcastle, Australia, ali.quazi@newcastle.edu.au Anton Kriz, University of Newcastle, Australia, anton.kriz@newcastle.edu.au

ABSTRACT

This paper presents a summary of a doctoral dissertation investigating the application of customer relationship management (CRM) theory to the online context. The major finding of this study was to confirm that the central proposition of CRM theory is supported in the online context—that is, while the operational context influences the extent to which effective service enhances the relationships between a firm and its customers, and their resulting perceptions of customer loyalty; there is general support for a mediating relationship in which effective service will enhance the quality of the relationship between a firm and its customer, and increase loyalty perceptions from the customer. The study has also revealed that the service delivery channel has a significant and differential affect on the central proposition and the interactions of the key relationship marketing constructs. Perceptions of financial risk were not observed to significantly affect either service quality or relationship quality perceptions.

Keywords: Customer relationship management (CRM), online context, service operations, electronic marketing, electronic business.

INTRODUCTION

Customer relationship management (CRM) has received widespread attention among both academics and practitioners over the past decade. Its popularity has been largely predicated on the belief that a systematic approach to the management of customer relationships will result in greater loyalty and higher financial returns [14]. In terms of electronic marketing (e-marketing), CRM has been espoused as a means of enhancing customer loyalty and curtailing the large proportion of business failures in the online industry [11].

The nurturing of loyal customers has been identified as the single most important issue for business success [15] [10]. However, this has been confounded in e-marketing by a focus on aggressive customer acquisition rather than on building enduring relationships with loyal customers [5]. According to Gefen [7], many firms have been successful in attracting attention and completing an occasional transaction online, but they have had difficulties in inducing people to return. The same authors noted that this situation is complicated by the fact that most firms spend more on acquiring a typical customer than they are likely to make in profit from the 'buying life' of that customer.

One of the difficulties of theory development in this area is uncertainty regarding the applicability of established theories in different contexts. Scullin *et al.* [16] suggested that the real value of online marketing will be ascertainable only when there is a clearer understanding of how established economic and managerial theories apply in this new environment; in particular, how such theories apply to the challenge of creating customer loyalty in the online environment. Similarly, Durkin and Howcroft [6] have suggested that, despite the recent popularity of CRM, there is still much to be understood about the development of strong relationships in the electronic marketplace (e-marketplace).

Against this background, the present research endeavours to clarify the role of relationship marketing in the management of customer relationships and the development of customer loyalty in the online context. In particular, the research attempts to identify the key drivers of service quality and relationship quality in the online context, and the effect of relationships on attitudes and behaviours.

RESEARCH PROBLEM AND HYPOTHESES

Burns and Bush [3] assert that an effective research study in management should provide the information that managers require to resolve a particular problem. In accordance with this view, the present study endeavours to assist online businesses in developing loyal relationships with customers. The research will add to academic knowledge in the area of relationship marketing by investigating the espoused link between effective relationships and customer retention in the domain of online retailing—a domain in which this link has received little research attention.

The research aims to identify the drivers that lead to the delivery of superior service and the development of effective relationships with customers. The research problem can be presented in the following general terms:

How do firms create effective and enduring relationships with their customers in the online context?

In addressing this research problem, three research issues and sixteen hypotheses have been identified from a review of the literature. The research issues and their associated hypotheses are listed below.

Research issue 1 (R1):

How are the principal constructs of relationship marketing conceptualised, and how do they interact in the development of superior relationships in the online context?

The hypotheses to be tested with respect to this research issue are as follows:

Hypothesis 1 (H1): Overall retail service quality in the online context is comprised of the dimensions of: (i) physical aspects; (ii) reliability; (iii) personal interaction; (iv) problem-solving; and (v) policy.

Hypothesis 2 (H2): Retail service quality is positively associated with customer loyalty in the online context.

Hypothesis 3 (H3): Overall relationship quality in the retail context is comprised of the dimensions of: (i) trust; (ii) effort/value; (iii) understanding; (iv) communication; and (v) cooperation.

Hypothesis 4 (H4): Relationship quality is positively associated with customer loyalty in the online context.

Hypothesis 5 (H5): Customer loyalty in the online context is comprised of both an attitudinal component and a behavioural component, and the level of attitudinal loyalty is positively associated with the level of behavioural loyalty.

Hypothesis 6 (H6): Relationship quality mediates the influence of service quality on customer loyalty in the online context (rather than service quality and customer loyalty each having an independent effect on customer loyalty).

Research issue 2 (R2):

How do perceptions of security affect the constructs of service quality and relationship quality?

The hypotheses to be tested with respect to this research issue are as follows:

Hypothesis 7 (H7): Perceptions of retail service quality in the online context vary with different levels of financial risk.

Hypothesis 8 (H8): Perceptions of relationship quality in the online context vary with different levels of financial risk.

Research issue 3 (R3):

How does the service-delivery channel affect the conceptualisation and interaction of these constructs?

The hypotheses to be tested with respect to this research issue are as follows:

H9: Overall retail service quality in the offline and online contexts is comprised of the dimensions of: (i) physical aspects; (ii) reliability; (iii) personal interaction; (iv) problem-solving; and (v) policy.

H10: Retail service quality is positively associated with customer loyalty in both the offline and online contexts.

H11: Overall relationship quality in the banking context is comprised of the dimensions of: (i) trust; (ii) effort; (iii)value; (iv) understanding; (v) communication; (vi) customer power; (vii) social bonds/liking; and (viii) cooperation.

H12: Relationship quality is positively associated with customer loyalty in both the offline and online contexts.

H13: Customer loyalty is comprised of both an attitudinal component and a behavioural component, and the level of attitudinal loyalty is positively associated with the level of behavioural loyalty in both the offline and online contexts.

H14: Relationship quality mediates the influence of service quality on customer loyalty in the offline and online contexts (rather than service quality and relationship quality each having an independent effect on customer loyalty).

H15: The service-delivery channel affects the impact of service quality on relationship quality.

H16: The service-delivery channel affects the impact of relationship quality on loyalty.

JUSTIFICATION FOR RESEARCH

The sale of goods and services online is a major contributor to the Australian economy. Indeed, the total value of online commerce in Australia increased from \$A5.1 billion in 2000 to \$A33 billion in 2005 [1]. However, this figure represents only a fraction of the total global sales conducted online, and worldwide e-commerce is expected to reach over \$US5.5 trillion by the end of 2006 [19].

Despite the economic significance of the online sector, there is a relative paucity of research that has examined the dynamics of online exchange and/or the requirements for building effective relationships online. The literature that does exist on commercial exchange in an online environment has tended to concentrate on the process of effective service delivery (that is, website design, pricing, assortment, and security), rather than the factors that lead to the creation of strong and enduring relationships [12] [18]. With regard to CRM, Sibley Jr. [17] has asserted that research has tended to focus on developing the theory of CRM, rather than testing the strength of the central proposition—that superior service leads to improved relationship quality which, in turn, results in greater customer retention and loyalty.

The present research thus contributes to the existing literature by: (i) providing valuable insights into online exchanges; and (ii) examining the effects of service quality and relationship quality on customer loyalty. In doing so, this research: (i) provides practical guidance to practitioners who desire an improved understanding of the relational needs of their customers; and (ii) assists academics who desire a better understanding of the links between relationship quality and customer retention in a consumer retail context.

METHODOLOGY

The present research adopts a three-stage methodology that includes: (i) a single cross-sectional survey of online shoppers; (ii) an involvement experiment testing the influence of perceived financial risk; and (iii) a survey of retail banking customers using a single cross-sectional methodology.

The first of these, the *single cross-sectional survey of online shoppers*, is quantitative in nature. It includes a range of nominal, ordinal, and scaled response questions, and is designed to gather the opinions of online shoppers regarding service quality, relationship quality, and loyalty (see Appendix). The survey is administered to a convenience sample of 249 students at the University of Newcastle, resulting in a useable sample of 145 respondents. It utilised a survey instrument consisting of modified scales for retail service quality [4], relationship quality [13], attitudinal loyalty [20], and behavioural loyalty [9]. The data thus obtained are subjected to a range of statistical processes including descriptive analysis, correlations, factor analysis, linear regression and structural equation modeling. The aim of this analysis is to validate the measurement instruments and resolve the hypotheses.

The second element in the methodology, the *involvement experiment testing the influence of perceived financial risk*, utilises the same instrument as that used in the first element in the methodology to conduct a 2x2 (between subjects) factorial test of the perceptions of 108 final-year marketing students regarding retail service quality across two different products and two different online retailers. The data thus obtained are subjected to a range of statistical processes including descriptive analysis, factor analysis, and analysis of variance.

The final element in the methodology, the *survey of retail banking customers*, utilises a modified version of the instrument used in the first element in the methodology to explore whether a sample of 451 respondents differ in their perceptions of the key constructs across the online and offline banking contexts. The data thus obtained are subjected to a range of statistical processes including descriptive analysis, correlations, factor analysis, linear regression, analysis of variance, and structural equation modeling.

SCOPE OF THE STUDY

The scope of this study is online retailers and banking institutions and their Australian customers. In particular, the study examines the applicability of relationship-marketing theory in the domain of business-to-consumer (B2C) marketing. This

examination concentrates primarily on the interaction between service quality and relationship quality, and the consequence of this interaction on the development of customer loyalty.

- The conceptualisations of relationship marketing and the other constructs used in this study are based on two underlying philosophical assumptions:
- Although relationship marketing is essentially an inter-personal concept, a relational exchange can also occur at the macro-level between firm and customer.
- Relationship marketing can be effectively applied to consumer situations and the online retail and banking contexts.

It is acknowledged that the research methods used in this study, like all research methods, have some limitations. In particular, the use of convenience samples and the use of a single cross-sectional method for the survey of online shoppers and online banking customers means that the applicability of the results obtained from these particular studies might be limited to the individuals sampled. Although it is tempting to generalise such results to the broader population of Internet shoppers and banking customers, this should be undertaken with caution in view of the limitations of the study with respect to statistical accuracy and representativeness of the sample. Similar limitations are associated with the experiment undertaken for the second stage of the methodology.

CONCLUSIONS ABOUT RESEARCH PROBLEM

The first research issue related to gaining a better understanding of how the principal constructs of service quality, relationship quality, and customer loyalty interact. Hypotheses 1 to 6 proposed that contextual differences did not significantly affect the ways in which service quality, relationship quality, and customer loyalty were perceived. While the dimensionality of the main constructs was consistent across online contexts, there were observed differences in which dimensions were most important between the retail and banking situations (please email the principle author for more detailed findings related to each of the hyptheses). The results also showed mixed support for the extent to which relationship quality mediated the effect of service quality on customer loyalty in the online context, with a fully mediated model supported in the online retail context and a partial mediating model supported in the online banking context. These findings demonstrate and confirm that relationship marketing theory has relevance in the online context.

The second research issue related to the effect of perceived financial risk, and was resolved by testing hypotheses 7 and 8. The findings revealed that perceived financial risk had only a moderate effect on some of the service-quality dimensions, and no effect at all on relationship quality. This suggests that the commonly cited concerns about financial security in the online context had minimal effect on the way in which service was evaluated in the present study; nor did financial risk have any significant effect on whether customers would continue to have a relationship, or develop loyalty, with a particular firm.

The third and final research issue was concerned with the effect of the service-delivery channel. Hypothesis 9 to 16 proposed that while the online service-delivery channel only minimally affected perceptions of service quality, relationship quality and loyalty; it had a significant affect on the interactions of these constructs. The findings once again supported the dimensionality of the key constructs across both channels, with observed differences in the key drivers, and a partial mediating model observed as having the best fit with the data in both the online and offline service delivery channel. This suggests that firms that operate in multiple channels need to give careful consideration to the nuances of the channel in developing their service-delivery and relationship-building strategies. In particular, the relationship between the key constructs was found to be more pronounced in the online service delivery channel.

The major finding of this study was to confirm that the central proposition of customer-relationship management theory is supported in the online context—that is, while the operational context influences the extent to which effective service enhances the relationships between a firm and its customers, and their resulting perceptions of customer loyalty; there is general support for a formative relationship in which effective service will enhance the quality of the relationship between a firm and its customer, and increase loyalty perceptions from the customer. The study has also revealed that the service delivery channel has a significant affect on the central proposition of customer-relationship management theory, and the interactions of the key relationship marketing constructs. Perceptions of financial risk were not observed to significantly affect either service quality or relationship quality perceptions. These key findings have been presented graphically in Figure 1.

Implications for Theory

The present research contributes to theory in a number of important areas. First, it has validated the applicability of four previously developed scales. According to Jankowicz [8], this is worthy in itself. In his view, researchers often develop instruments without regard to whether alternative measurement scales have been previously validated. In this regard, the present research has therefore made a valuable contribution by validating the applicability (across a variety of operational contexts) of existing scales for retail service quality, relationship quality, attitudinal loyalty, and behavioural loyalty.

Second, the present research has clarified the interactions among the three important relationship-marketing constructs—service quality, relationship quality, and loyalty in a variety of contexts (online retail, online banking, and offline banking). The study

has confirmed that service quality affects relationship quality, and that this, in turn, affects customer loyalty. However, although this mediating relationship was shown to exist in all contexts, the constructs in each context were shown to be characterised by a distinctive set of drivers. Further, there was also evidence of a partial mediating relationship present within the banking context; confirming the importance of the direct relationship between service quality and loyalty, in addition to the mediating relationship.

Third, in assessing the relationships among these various constructs, the research considered the effects of: (i) perceived financial risk; and (ii) the online channel. The finding that the effect of financial risk was non-significant adds to the ongoing debate in the literature regarding the importance of security in the online context. In particular, the present study suggests that concerns about financial risk have little effect on perceptions of the service received; nor do such concerns affect a consumer's assessment of the relationship with the service provider. With regard to the significance of the service-delivery channel on the interaction between the principle constructs, the present study has demonstrated that the online channel affected perceptions of service quality and relationship quality, and influenced their impact on relationship quality and loyalty respectively. The present study thus adds to the growing interest in the question of how services and relationships should be managed as service delivery becomes increasingly fragmented through the emergence of multiple channels [2].

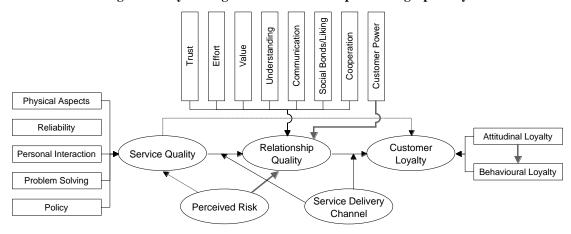


Figure 1: Key findings from this research presented graphically

Legend: black line represents supported relationship; broken black line represents partially supported relationship; grey bold line represents unsupported relationship.

Fourth, the present research has contributed to the theoretical understanding of customer loyalty by confirming the importance of a dyadic conceptualisation of loyalty (including both attitudes and behaviours). However, the findings of the study provided no support for a causal relationship between attitudes and behaviours. This finding is significant as it challenges an oft-cited and seldom tested assumption of consumer behaviour—that positive attitudes toward a product or firm will influence a customer's willingness to participate in future exchanges.

Finally, the research has added to methodological theory with respect to the application of online research methods. The online surveys and online experiment used in the present study have been shown to be valid and efficacious. This strengthens the case for wider adoption of such methodologies.

Implications for Practice

The findings of this study have several implications for marketing practice. In particular, the study has practical implications for the effective use of customer-relationship management tools. Users of these tools have tended to focus on the purchasing characteristics of customers, while ignoring the key drivers or effective service, strong relationships and loyalty. The findings of the present research provide guidance to marketing managers with regard to the identification and enhancement of these drivers.

For example, the research has emphasised the importance of developing 'trust' and making an 'effort' in attempting to foster effective relationships, and has confirmed the importance of having good 'policy' and 'problem-solving' strategies in attempting to create perceptions of service quality. Likewise, the research has confirmed the importance of such factors in the development of customer loyalty. This understanding of how the principle constructs are conceptualised, and how these constructs interact in the online context, can guide firms to enhance their CRM strategies (see Figure 2).

Although the present study analysed broad retail and banking marketplaces, marketers who are responsible for a particular portfolio of brands and/or selected service-delivery channels will be able to apply the refined measures used here as tools to investigate the customer perceptions within their own market segments and across various channels of interest to them.

Alternatively, the measures employed in this research could inform the development of a checklist that could be used to benchmark a firm's current performance against their past performance, or similiarly, enable firms to benchmark against the performance of their key competitors. This could be especially valuable for marketers who are already acquainted with customer-relationship management, with the results of such activities able to guide decisions about service delivery and market segmentation (ie. segments can be developed on the basis of attitudes and context in addition to behaviours).

The study also confirmed the significance of the online service delivery channel in the development of enduring relationships. As indicated in Figure 2, marketers would benefit from measuring the differential impact of their service delivery across multiple channels. Likewise, the complimentary nature of the online channel should motivate marketers to develop strategies that make better use of the channel's ability to positively moderate the overall relationship and loyalty perceptions of their customers.

Limitations

As with all research projects, the present study has limitations that need to be considered when interpreting the results. First, the inevitable restraints of time and resources that accompany a study such as this meant that the research examined only *customers'* perceptions of relationship-marketing activities. It is acknowledged that this fails to address the question of the perceptions of the firms themselves, their strategic priorities, and their resource limitations. Similarly, these inevitable restraints prevented an examination of relationship marketing in the important business-to-business (B2B) context.

Second, the research used a behavioural intention scale as part of the loyalty measurement. Although the Juster scale [9] is a reliable predictor of future behaviours, the correlation of these behaviours with actual behaviours would have provided a more comprehensive analysis. However, this would have required a longitudinal research design, which was not possible in the context of the time and resources available to the present study.

Third, the choice of research design also limits the generalisability of the findings. For example, the use of student samples is often criticised for not being representative; however, in the case of this research the student samples used here were not significantly dissimilar to the broader Internet user population [1]. Likewise, the adaptation of previously validated scales carried some risk of misspecification; however, this was minimised by careful scale selection and refinement. In any case, the use of previously validated scales in a new context does have benefits in terms of the development of methodological theory (as noted above).

Despite these limitations, it is submitted that the research strategy employed for this study can be considered appropriate and efficacious.

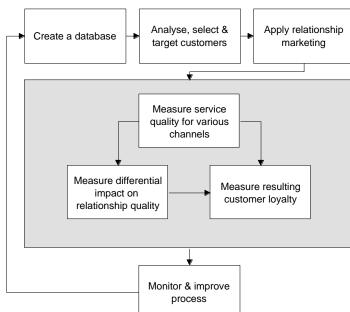


Figure 2: Enhanced model for CRM

Further Research

Future research could build on this research by extending its scope to include a consideration of additional variables. Internal factors such as psychographics and demographics could be examined, as could external factors such as defensive marketing tactics of competitors, website quality, and the activities of supply-chain members. All of these could be explored in terms of their effects on the structural relationships among service quality, relationship quality, and customer loyalty. In addition, the

personal characteristics of the consumers (ie. gender, age, education, experience etc) could be investigated for possible moderation effects; likewise, the effect of loyalty on profitability could be included in future analysis.

Further research is also required into the present study's findings with respect to: (i) attitudinal loyalty; and (ii) perceived financial risk. With regard to the first, the apparent lack of influence of attitudinal loyalty on behavioural loyalty requires further attention, as does the effect of attitudes on actual behaviours (rather than behavioural intentions). With respect to financial risk, future research could explore other ways to investigate perceived financial risk; alternatively the current method could be applied within a real purchase situation, rather than a hypothetical scenario.

Future research could also examine the transferability of these methodologies to different contexts and viewpoints. In particular, the business-to-business (B2B) context could be included in future research. Furthermore, it would be interesting to explore other service-delivery channels, and the effect of these channels on overall relationship with, and loyalty to, a firm.

Finally, future research in this subject area could be conducted using alternative methodologies or samples. For example, changes over time could be assessed by a longitudinal study. In addition, or alternatively, the present study could be replicated using a different sample and a greater number of operational contexts.

CONCLUSION

This paper has provided a discussion of the conclusions and implications of this research. The discussion has included a summary of the research findings against each of the hypotheses, an elaboration of the conclusions related to each of the three research issues, a consideration of the implications for practitioners and academics, and a brief discussion of the limitations of the present study and the opportunities for future research.

It is apparent that this research has made a significant contribution in a number of areas. In particular, the research has achieved its principal objective of testing the central proposition of customer-relationship management in the online context. This examination led to the proposal that relationship quality is a mediating variable between service quality and loyalty—and subsequent testing confirmed this mediating role.

The research has also resolved the three identified research issues by presenting sixteen distinct conclusions as follows:

- Conclusion 1: The dimensionality of the retail service quality (RSQ) construct was supported in different online contexts.
- Conclusion 2: Service quality was antecedent to customer loyalty in different online contexts.
- Conclusion 3: The dimensionality of the relationship quality (RQ) construct was supported in the retail context.
- Conclusion 4: Relationship quality (RQ) was antecedent to customer loyalty in different online contexts.
- Conclusion 5: Attitudinal loyalty was not found to drive behavioural loyalty in different online contexts.
- Conclusion 6: Relationship quality (RQ) mediated the influence of service quality (RSQ) on customer loyalty in both online contexts.
- Conclusion 7: Perceptions of retail service quality (RSQ) were only partially affected by different levels of financial risk in the online context.
- Conclusion 8: Perceptions of relationship quality (RQ) did not vary with different levels of financial risk in the online context.
- Conclusion 9: The dimensionality of the retail service quality (RSQ) construct was supported in both the offline and online contexts (with modification).
- Conclusion 10: Service quality (RSQ) was antecedent to customer loyalty in both the offline and online contexts.
- Conclusion 11: The dimensionality of the relationship quality (RQ) construct was supported in the banking context.
- Conclusion 12: Relationship quality (RQ) was antecedent to customer loyalty in both the offline and online contexts.
- Conclusion 13: Attitudinal loyalty was not found to drive behavioural loyalty in either the offline or online contexts.
- Conclusion 14: Relationship quality (RQ) mediated the influence of service quality on customer loyalty in both the offline and online contexts.
- Conclusion 15: The service-delivery channel affected the impact of service quality on relationship quality.
- Conclusion 16: The service-delivery channel affected the impact of relationship quality on loyalty.

In summary, it was found that the selected scales were applicable with modification, that the dimensionality of the principal constructs was supported, and that the hypothesised structural relationships were found to be applicable in most circumstances. Although the service-delivery channel was found to have a moderating effect on the central proposition, there was no support for a proposed moderating effect of perceived financial risk.

Despite the acknowledged limitations of the present study, it is apparent from a consideration of the implications of this research and the opportunities for future investigation, that this study has made a significant contribution to a better understanding of relationship-marketing theory and a better appreciation of how to realise practical benefit from customer-relationship

REFERENCES

- [1] ABS (2006), *Use of Internet by households in Australia (Series 8147*), Australian-Bureau-Statistics, Commonwealth of Australia, Canberra.
- [2] Bolton, R. (2004) "Hot Topics in Services (Pre-Conference Consortium)", *Proceedings of the Frontiers in Service Conference*, Miami.
- [3] Burns, A.C. and Bush, R.F. (1998), Marketing research, Prentice Hall, Upper Saddle River, NJ.
- [4] Dabholkar, P., Thorpe, D.I. and Rentz, J.O. (1996) "A Measure of Service Quality for Retail Stores", *Journal of the Academy of Marketing Science*, Vol. 24, pp. 3-16.
- [5] Daly, J. (2001) "Measuring Customer Loyalty", Business 2.0, pp. 1-2.
- [6] Durkin, M.G. and Howcroft, B. (2003) "Relationship marketing in the banking sector: the impact of new technologies", *Marketing Intelligence & Planning*, Vol. 21, No. 1, pp. 61-71.
- [7] Gefen, D. (2000) "E-commerce: the role of familiarity and trust", Omega, Vol. 28, No. 6, pp. 725-37.
- [8] Jankowicz, A.D. (2000) Business Research Methods, Thompson Learning, Cornwall.
- [9] Juster, F.T. (1966) "Consumer Buying Intentions and Purchase Probability: An Experiment in Survey Design", *Journal of the American Statistical Association*, Vol. 61, No. 315, pp. 658-96.
- [10] Lee, J., Lee, J. and Fieck, L. (2001) "The Impact of Switching Costs on the Customer Satisfaction-Loyalty Link: Mobile Phone Services in France", *Journal of Services Marketing*, Vol. 15, No. 1, pp. 35-48.
- [11] Lee-Kelley, L., Gilbert, D. and Mannicom, R. (2003) "How e-CRM can enhance customer loyalty", *Marketing Intelligence & Planning*, Vol. 21, No. 4, pp. 239-48.
- [12] Medlin, C., Roy, S. and Ham Chai, T. (1999) "World Wide Web versus mail surveys: A comparison and report", *Proceedings of the ANZMAC Conference*, Sydney.
- [13] Page, N. (2000) Developing Subjective and Objective Measures of Relationship Quality and Investigation of the Discriminant Validity Between Relationship Quality and Service Quality (Unpublished Thesis), University of Adelaide, Adelaide.
- [14] Reichheld, F.F. (1996) "Learning from customer defections", *Harvard Business Review*, Vol. 74, No. 2, pp. 56-69.
- [15] Reichheld, F.F. and Sasser Jr, W.E. (1990) "Zero defections: Quality comes to services", *Harvard Business Review*, Vol. 68, No. 5, pp. 105-11.
- [16] Scullin, S.S., Fjermestad, J. and Romano, N. (2004) "E-relationship marketing: changes in traditional marketing as an outcome of electronic customer relationship management", *The Journal of Enterprise Information Management*, Vol. 17, No. 6, pp. 410-15.
- [17] Sibley Jr, R. (1999) *The impact of relationship quality on profitability: a health care services perspective (Unpublished Thesis)*, UMI/Georgia State University, Ann Arbor, MI.
- [18] Wang, F., Head, M. and Archer, N. (2000) "A relationship-building model for the Web retail marketplace", *Internet Research: Electronic Networking Applications and Policy*, Vol. 10, No. 5, pp. 374-84.
- [19] Yang, J. and Miao, G. (2005) "The Estimates and Forecasts of Worldwide e-Commerce", *ACM International Conference Series*, Vol. 113, pp. 52-56.
- [20] Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996) "The Behavioral Consequences of Service Quality", *Journal of Marketing*, Vol. 60, No. 2, pp. 31-46.